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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SHEWAREGED, BETELHEM

ART UNIT PAPER NUMBER

1774

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/823,920

Applicant(s)

RANGWALLA, IMTIAZ

Examiner

Betelhem Shewareged

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 and 15-43 is/are pending in the application.
- 4a) Of the above claim(s) 27-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-26 and 38-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's response filed on 06/19/2006 has been fully considered. Claims 1, 13, 15, 20 and 38 are amended, claim 14 is canceled, claim 39-43 are added, claims 1-13 and 15-43 are pending. (NOTE: Claims 27-37 are withdrawn from consideration as non-elected invention).

### ***Election/Restrictions***

2. Applicant's election with traverse of Group I in the reply filed on 06/19/2006 is acknowledged. The traversal is on the ground(s) that a search involving claims 27-37 could be done without any undue burden on the Examiner. This is not found persuasive because the search for the first group is done class 428 and the search for the second group is done in class 427, and search involving two distinct groups put undue burden on the Examiner.

3. The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 103***

4. Claims 1-13, 15-26 and 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rangwalla et al. (US 2003/0001108 A1) in view of Pennaz (US 5,382,282).

5. Rangwalla discloses a packaging material comprising a substrate, a lacquer coating on the substrate, and an ink print layer between the substrate and the ink print layer, wherein the lacquer coating substantially identical to the claimed lacquer ([0097]-

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[0108]), and has a normalized thickness of 0.5-20 g/m<sup>2</sup> [0109]. The substrate is disclosed in [0112]. The lacquer is curable by particle beam machine [0110] and [0111]. Sandwiching the print layer and any intermediate layer between materials that are used for forming the substrate is well known in the packaging material art (see Example 8). The ink in the print layer can be electron beam curable [0116]. Rangwalla does not disclose the claimed ink composition.

6. Pennaz teaches an electron beam curable ink composition for printing, wherein the ink composition is disclosed in (col. 20, lines 1-43).

7. Rangwalla and Pennaz are analogous art because they are from the same field of endeavor that is the particle beam curable material art. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the ink composition of Pennaz with the invention of Rangwalla so as to provide a printed packaging material containing ink composition having enhanced water stability and viscosity (see col. 19, line 38 of Pennaz).

### ***Response to Arguments***

8. Applicant's argument is based on that there is no motivation for combining the invention of Rangwalla and Pennaz. This argument is not persuasive because Rangwalla teaches a substrate and a lacquer substantially identical to the claimed substrate and lacquer, respectively. Rangwalla further teaches that an ink print layer provided between the substrate and the lacquer (see previous rejection). Even though Rangwalla does not teach the use of electron beam curable ink composition selected

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from acrylate esters, vinyl ethers, cycloaliphatic diepoxides, and polyols; Rangwalla teaches the use of electron beam curable ink composition. In addition, Pennaz teaches the use of electron beam curable ink composition selected from acrylate esters, vinyl ethers, glycol and compound listed in col. 20, lines 1-43). The ink composition of Pennaz is provided on a paper or other print substrate (col. 1, line 65 thru col. 2, line 3). The motivation for combining Rangwalla and Pennaz is the need for the use of electron beam curable ink composition to be applied on a layered material.

9. Applicant further argues that Rangwalla, Pennaz or combination of Rangwalla and Pennaz do not teach or suggest bonding between the ink layer and the lacquer. This argument is not persuasive because since neither Rangwalla nor Pennaz expressly discloses that the ink does not bond with lacquer, and both the ink and the lacquer are cured by the same method of curing, the ink inherently bonds with the lacquer.

10. For the above reasons, claims 1-13, 15-26 and 38 stand rejected and claims 39-43 are included on the rejection.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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12. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 571-272-1529. The examiner can normally be reached on Mon.-Fri. 8:00AM-4:30PM.


14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

B.S.

August 22, 2006.

  
BETELHEM SHEWAREGED  
PRIMARY EXAMINER